

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at p. 2, line 22 – p. 3. line 12 with the following:

One solution to this problem known in the art is to digitize the force/torque outputs at the FT sensor, and transmit only digital data – including both force/torque outputs and calibration data – to a data analysis system. However, this solution presents several drawbacks. FT sensors are often designed to be as compact as possible, and the inclusion of analog-to-digital converter (ADC) circuits in the FT sensor housing increases its size. In many applications, FT sensors must be rugged, and the ADC electronics may adversely impact ruggedness and reliability. Additionally, in many applications, precise quantization of the force/torque readings is required, necessitating sophisticated data acquisition (DAQ) electronics that may be updated several times over the life of the FT sensor. In such applications, a superior long-term solution is for the FT sensor to output analog values, and receive them with a DAQ card of arbitrary complexity and sophistication. An additional benefit of this solution is that a variety of DAQ cards are commercially available for each generation of computer interface bus, such as EISA, MCA, PCI, S-Bus, etc. Thus, the data analysis system can easily grow in sophistication without sacrificing the investment in a particular set of [[PT]] FT sensors. However, the problem of the association of digital calibration data with the analog FT sensor, and the transmission of both to a data acquisition system, remains.